

Exhibit No.:
Issue: Depreciation
Witness: Rosella L. Schad, PE, CPA
Sponsoring Party: MoPSC Staff
Type of Exhibit: Direct Testimony
Case No.: ER-2007-0004
Date Testimony Prepared: January 18, 2007

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

DIRECT TESTIMONY

OF

ROSELLA L. SCHAD, PE, CPA

AQUILA, INC.
d/b/a AQUILA NETWORKS-MPS (Electric)
AND
AQUILA NETWORKS-L&P (Electric)

CASE NO. ER-2007-0004

Jefferson City, Missouri
January 2007

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Aquila, Inc. d/b/a Aquila)
Networks-MPS and Aquila Networks-L&P, for)
authority to file tariffs increasing electric rates for)
the service provided to customers in the Aquila)
Networks-MPS and Aquila Networks-L&P service)
area.)

Case No. ER-2007-0004

AFFIDAVIT OF ROSELLA L. SCHAD, PE, CPA

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

Rosella L. Schad, PE, CPA, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 6 pages to be presented in the above case; that the answers in the foregoing Direct Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.

Rosella L. Schad, PE, CPA
Rosella L. Schad, PE, CPA

Subscribed and sworn to before me this 17th day of January 2007.

Toni M. Charlton



TONI M. CHARLTON
Notary Public - State of Missouri
My Commission Expires December 28, 2008
Cole County
Commission #04474301

DIRECT TESTIMONY
OF
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AQUILA, INC.
d/b/a AQUILA NETWORKS-MPS (Electric)
AND AQUILA NETWORKS-L&P (Electric)

Q. Please state your name and business address.

A. Rosella L. Schad, P.O. Box 360, Jefferson City, MO 65102.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Public Service Commission (Commission) as an Engineer in the Engineering & Management Services Department.

Q. What is your educational training and professional background?

A. I received a Bachelor of Science degree (1978) in Mechanical Engineering and a Masters of Public Administration (2004) from the University of Missouri-Columbia. I have completed accounting coursework from Columbia College. I am currently enrolled at the University of Missouri-Columbia in a Masters of Business Administration, with an emphasis in Finance. My anticipated completion is December 2008.

I am a Licensed Professional Engineer and Certified Public Accountant in the State of Missouri. I am a member of the National Society of Professional Engineers, the Society of Depreciation Professionals, and the Missouri Society of Certified Public Accountants. I was employed by Union Electric (now AmerenUE) as an Engineer Intern during the summer of 1977. I was employed as a Mechanical Engineer by Union Electric in its Nuclear

1 Construction Department from 1978 to 1980. I have been with the Missouri Public Service
2 Commission's Staff (Staff) since 1999. In my current position I have completed training in
3 depreciation concepts, attended numerous industry seminars for electric, steam, natural gas,
4 telecommunications, water, and wastewater regulatory matters and made on-site tours of
5 many of the facilities of the electric, steam, natural gas, telecommunications, water, and
6 wastewater utilities operating in the State of Missouri, which are regulated by the
7 Commission.

8 Q. What are your duties at the Commission?

9 A. I am responsible for engineering analyses and depreciation rate determinations
10 of companies regulated by the Commission.

11 Q. Have you testified before this Commission before?

12 A. Yes. Schedule 1, attached to my testimony, shows a list of Commission cases
13 in which I have filed testimony and the issues that I addressed.

14 Q. What expert knowledge, skill, experience, training, or education do you have
15 in depreciation rate analyses?

16 A. I have acquired general knowledge of these topics through my experience and
17 analyses in prior rate cases before this Commission presented in Schedule 1 and I have
18 assisted Staff's depreciation rate filings in Case Nos. GR-2005-0284, ER-2001-672,
19 ER-2001-299, WR-2000-844 and GR-2000-512. I have also reviewed prior Commission
20 decisions with regard to depreciation issues. I have reviewed testimony, workpapers, and
21 responses to Staff's data requests addressing these issues in prior cases.

22 I have attended the PSC 2006 Water/Sewer Utility Roundtable. I have participated in
23 the National Conference of Regulatory Commission Engineers' meeting and symposiums

1 offered on current topics of regulation. I have received formal depreciation training offered
2 by Depreciation Programs, Inc. the Society of Depreciation Professionals, and Gannett
3 Fleming Valuation and Rate Consultants, Inc. I have had on-going discussions with Gannett
4 Fleming technical personnel regarding the functionality of the Gannett Fleming software,
5 including data input requirements, statistical analysis, and interpretation of results.

6 Q. What is your participation in Aquila's rate case, Case ER-2007-0004?

7 A. I reviewed selected accounts relating to depreciation, but did not perform an
8 entire depreciation study of all accounts. Staff recently performed depreciation studies in
9 each of Aquila's last three general electric rate increase cases, Case Nos. ER-2005-0436,
10 ER-2004-0034 and ER-2001-0672. I specifically performed the depreciation study in
11 Case No. ER-2004-0034.

12 Q. What depreciation analyses did you perform in this case?

13 A. I performed a limited review of the depreciation rates the Staff proposed in
14 Case No. ER-2005-0436. In particular I reviewed the average service lives for "Other
15 Production" accounts to consider the impact of a large increase of plant at combustion
16 turbine facilities. Staff's belief is that production facilities, such as combustion turbines,
17 should stay in service for longer periods than the depreciation rates and average service lives
18 previously recommended. In addition, in reviewing cost of removal expenditures, salvage
19 receipts, and retirements for the combustion turbine accounts for the past three years, the
20 Company has experienced zero percent net cost of removal; i.e., a zero net salvage
21 percentage.

22 Q. Why did Staff only perform a limited review of Aquila's depreciation rates in
23 this case?

1 A. Because Staff had conducted full depreciation studies in Aquila's last several
2 rate cases, a complete study was not necessary. However, in reviewing the depreciation rates
3 for the combustion turbine accounts, Accounts 341-346, it is the Staff's opinion that the lives
4 currently ordered are significantly short. As an example, the depreciable lives used in
5 Aquila's last case were set at 22 years for Account 343, Prime Movers, and 28 years for
6 Account 344, Generators, as compared to the depreciable lives of 52 years and 55 years,
7 respectively, the Commission ordered in The Empire District Electric Company's general
8 electric rate increase cases, Case Nos. ER-2002-0424 and ER-2004-0570. The Commission
9 did not change those rates in Case No. ER-2006-0315.

10 Q. What changes have occurred since Staff last performed its depreciation study
11 in Case No. ER-2005-0436?

12 A. When Staff conducted its depreciation study in Aquila's last rate case, the
13 South Harper generating units had no operating experience and the Greenwood generating
14 units had just been included in rate base; the Greenwood combustion turbines had been
15 leased units and their prior in-service experience was not included in actuarial plant data.
16 The South Harper units have been in operation since mid-year 2005. This means that since
17 that last rate case additional actuarial data is available for Staff to review. With the
18 additional operating experience and information available, Staff determined it should
19 examine the depreciation rates of the combustion turbines being operated by Aquila.

20 Q. What was the result of Staff's review of average service lives (ASL) and
21 negative net salvage percentage for the combustion turbine's two major accounts, Account
22 343, Prime Movers and Account 344, Generators?

1 A. From Staff's review of current actuarial plant data, a 33-year average service
2 life is appropriate for both the prime movers and generators' accounts and, as stated earlier,
3 from a review of recent cost of removal expenditures and salvage receipts, a net salvage
4 percentage of zero percent should be assigned.

5 Q. Can you provide a quantitative comparison of the potential changes in ASL
6 and negative net salvage percentage for all of the combustion turbine accounts, Accounts 341
7 through 346 from the last case?

8 A. Yes. The impact of the change in ASL only is approximate \$2 million less in
9 annual depreciation expense and the change in negative net salvage percentage only is
10 approximately \$0.5 million less in annual depreciation expense, for a total of \$2.5 million
11 less in annual depreciation expense.

12 Q. In this current case, Staff is imputing to Aquila a generating facility (referred
13 to by Staff as the MPS facility), which is comprised of a generating site with five 105 MW
14 combustion turbines. Can you provide a quantitative comparison, including the MPS facility,
15 incorporating the changes in ASL and negative net salvage percentage mentioned above?

16 A. Yes. The impact of the change in ASL only is approximately \$2.6 million less
17 in annual depreciation expense and the change in negative net salvage percentage only is
18 approximately \$0.7 million less in annual depreciation expense, for a total of \$3.3 million
19 less in annual depreciation expense.

20 Q. Is Staff recommending changes for the "Other Production" accounts
21 depreciation rates?

22 A. No.

1 Q. If the useful depreciable life of the combustion turbines is longer than
2 previously recommended by Staff and the negative net salvage percentage included in the
3 depreciation rate is not reflective of recent experience, why is Staff not recommending
4 changes to these accounts?

5 A. Typically, if Staff recommends changes in the depreciation rates it would
6 review all plant accounts in a depreciation study. When Staff made a determination that the
7 combustion turbine depreciation rates may need to be reduced, Staff informed the Company.
8 Staff requested Aquila review its other plant accounts' depreciation rates to see if any other
9 accounts need to be reviewed. As the Company indicated a need for further review of two
10 other production facilities, Sibley and Jeffrey Energy Center, Staff determined it would be
11 appropriate to review all the accounts again in the next rate case and any proposed changes to
12 the combustion turbine accounts would be done in the context of a full depreciation study.
13 Thus, Staff made no changes to Aquila's existing depreciation rates in the current rate case.

14 Q. Has the Company indicated when it intends on completing its next full
15 depreciation study?

16 A. Aquila witness, Dennis R. Williams, Vice-President-Electric Regulatory,
17 indicated verbally that Aquila will probably be complete a depreciation study and submit it to
18 Staff in early 2008.

19 Q. What is Staff's recommendation for depreciation rates in this case?

20 A. Staff recommends that the currently ordered depreciation rates be retained but
21 that Staff perform a complete depreciation study in the Company's next rate case.

22 Q. Does this conclude your direct testimony?

23 A. Yes.

CASE PROCEEDING PARTICIPATION

ROSELLA L. SCHAD, PE, CPA

COMPANY	CASE NO./ FILING	ISSUES
Algonquin Water Resources of Missouri, LLC	WR-2006-0425 & SR-2006-0426 (Consolidated) Direct, Rebuttal, Surrebuttal	Depreciation
Kansas City Power & Light Co.	ER-2006-0314 Direct and Surrebuttal	Depreciation
Silverleaf Resorts, Inc. and Algonquin Water Resources of Missouri, LLC	WO-2005-0206 Rebuttal	Depreciation
Laclede Gas Company	GR-99-315 Supplemental Rebuttal	Depreciation, Cost of Removal, and Net Salvage
Laclede Gas Company	GR-99-315 Supplemental Direct	Depreciation, Cost of Removal, and Net Salvage
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric) AND AQUILA NETWORKS – L&P (Electric and Steam)	ER-2004-0034 and HR-2004-0024 (Consolidated) Surrebuttal	Production Plant Retirement Dates; Accumulated Depreciation; Cost of Removal and Depreciation
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P	GR-2004-0072 Rebuttal	Depreciation; Accumulated Depreciation; Cost of Removal and Production Plant Retirement Dates
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric) AND AQUILA NETWORKS – L&P (Electric and Steam)	ER-2004-0034 and HR-2004-0024 (Consolidated) Rebuttal	Production Plant Retirement Dates; Accumulated Depreciation Reserve Balances; Cost of Removal and Depreciation
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P	GR-2004-0072 Direct	Depreciation and Accumulated Depreciation Reserve
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric) AND AQUILA NETWORKS – L&P (Electric and Steam)	ER-2004-0034 and HR-2004-0024 (Consolidated) Direct	Depreciation and Accumulated Depreciation Reserve
Laclede Gas Company	GR-2002-356 Rebuttal	Decommissioning
Laclede Gas Company	GR-2002-356 Direct	Depreciation

COMPANY	CASE NO./ FILING	ISSUES
Union Electric Company d/b/a AmerenUE	EC-2002-1 Surrebuttal	Depreciation; Steam Production Plant Retirement Dates; Decommissioning Costs; Callaway Interim Additions
Laclede Gas Company	GR-2001-629 Direct	Depreciation
Ozark Telephone Company	TC-2001-402 Direct	Depreciation Rates
Northeast Missouri Rural Telephone Company	TR-2001-344 Direct, Surrebuttal	Depreciation Rates
Oregon Farmers Mutual Telephone Company	TT-2001-328 Rebuttal	Depreciation Rates
KLM Telephone Company	TT-2001-120 Rebuttal	Depreciation Rates
Holway Telephone Company	TT-2001-119 Rebuttal	Depreciation Rates
Peace Valley Telephone Company	TT-2001-118 Rebuttal	Depreciation Rates
Iamo Telephone Company	TT-2001-116 Rebuttal	Depreciation Rates
Osage Water Company	WR-2000-557 Direct	Depreciation
Osage Water Company	SR-2000-556 Direct	Depreciation